

Figure 1

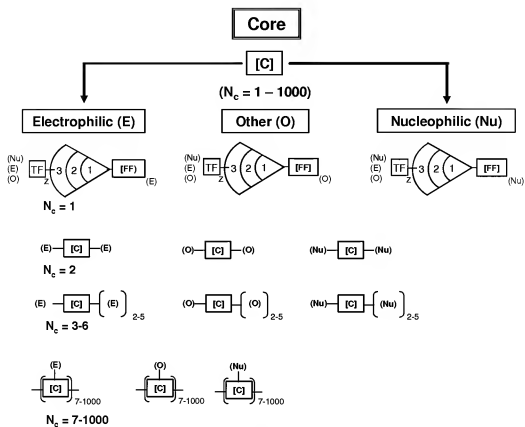
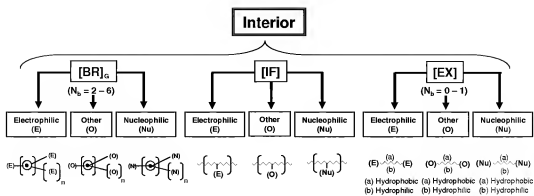


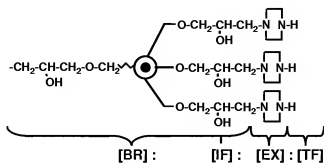
Figure 2



Where n = 1-4

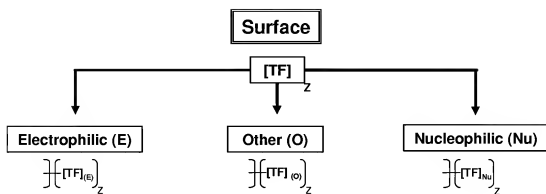
Figure 3

# Branch Cell Structure Resulting from a Tetra Glycidyl Ether



Where:  $N_b = 3$

Figure 4



Where:  $z = N_c N_b^G$

Figure 5

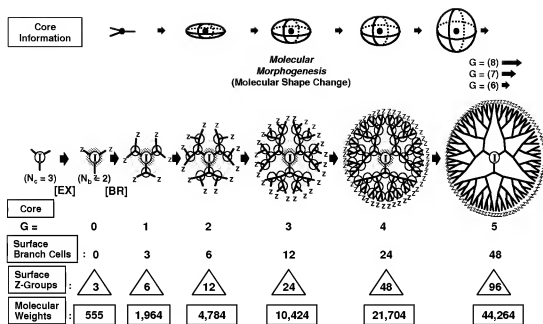


Figure 6

### Nanoscale Sterically Induced Stoichiometry (NSIS) Effects

$S_1$  = Size of Core, Scaffolding Core, Super Core

$S_2$  = Size of Branch Cell Reagent, FF-Dendron

Where:  $[TF] = \bullet$

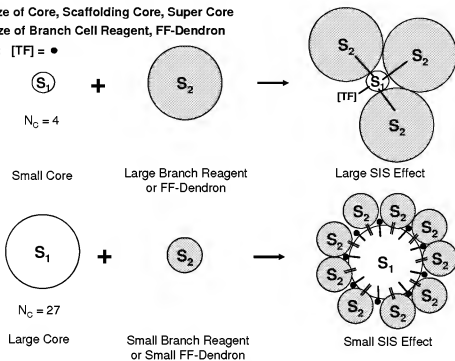


Figure 7

## NSIS Induced Formation of Nascent Functionality/Reactivity

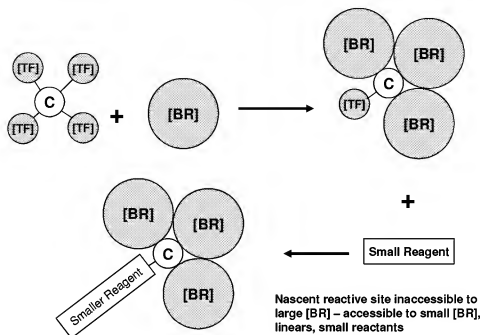


Figure 8



**Combinatorial Reactivities of Nucleophilic (Nu), Electrophilic (E), Other (O) (Free Radical) Features of the Core [C], Branch Cell Reagent [BR], Extender [EX], Focal Point Functional Dendron (FF-D) and Terminal Functionality [TF]**

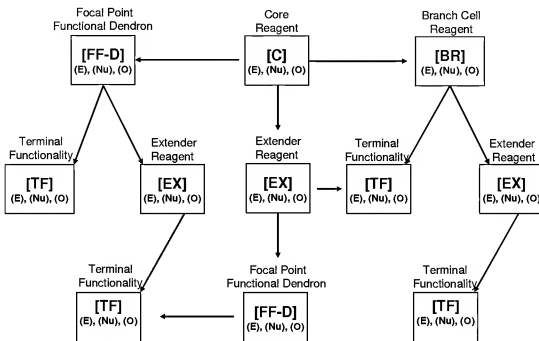
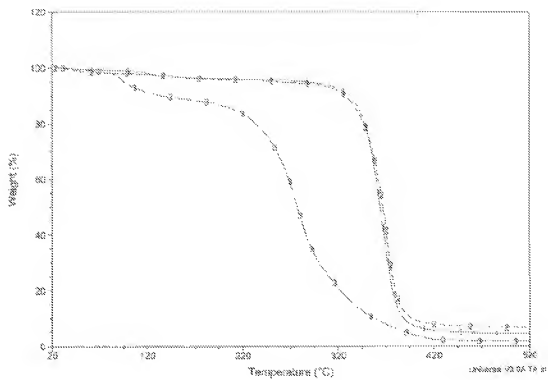


Figure 9

**Figure 10**

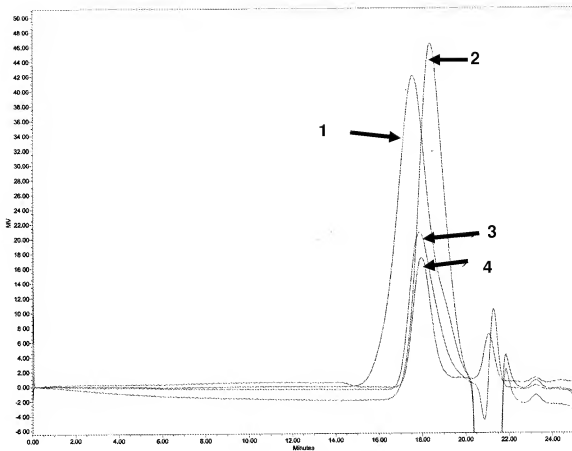


Figure 11